

MEMORANDUM

TO: Governing Board Members

FROM: Terrie Bates, Director, Water Resources Division

DATE: November 10, 2011

SUBJECT: Authorize entering into a 46-month Cooperative Agreement with the Florida Fish and Wildlife Conservation Commission, Florida Wildlife Research Institute to support the South Florida Fish Habitat Assessment Program

Background: Seagrass habitat is considered the most important indicator of the status of the District's Southern Estuaries - the presence of healthy seagrass cover is central to maintain and restore fish populations and water quality. The vulnerability of this habitat was demonstrated in the late 1980s and 1990s, when broad-scale seagrass die-off occurred in central and western Florida Bay, focusing public attention on water management effects on Florida Bay's health and spurring a call for South Florida restoration. One of the main goals of Comprehensive Everglades Restoration Plan (CERP) is to improve this vital fisheries habitat, increasing the species diversity and aerial extent of seagrass communities. The Cooperative Agreement with Florida Fish and Wildlife Conservation Commission (FFWCC) proposed here supports a comprehensive seagrass monitoring program (Fish Habitat Assessment Program, FHAP) that can effectively assess whether this CERP goal is being met, documenting the status and trends of seagrass distribution and abundance. FHAP data are critical for documenting CERP project success and informing project operations.

FHAP is part of the RECOVER Monitoring and Assessment Plan and is also specified as a critical element of the C-111 Spreader Canal Western Features (C-111SC) monitoring plan needed to assess the success of this expedited CERP project. This seagrass habitat will also be affected by operational changes resulting from implementation of the Everglades Restoration Transition Plan.

FHAP is closely coordinated to complement other monitoring within the Southern Estuaries, including nearshore northeast Florida Bay monitoring by Miami-Dade Department of Environment Resource Management (cooperative agreement with the SFWMD). FHAP data also are needed to extrapolate from faunal (fish and invertebrates) monitoring data from the National Oceanic and Atmospheric Administration (NOAA), which is funded by the United States Army Corps of Engineers (USACE) for CERP/RECOVER assessment. FHAP data also supports SFWMD evaluations of operations and Minimum Flows and Levels (including a potential rule update).

How this helps meet the District's 10-Year Strategic Plan: One of the main goals of CERP is to improve fisheries habitat by increasing species diversity and seagrass communities. This contract will gather seagrass data that is crucial to the overall assessment and adaptive management of the CERP projects.

Funding Source: This is a 46 month cooperative agreement with the Florida Fish and Wildlife Conservation Commission, Florida Wildlife Research Institute to support the South Florida Fish Habitat Assessment Monitoring Program in the amount of \$705,000 of which dedicated funds (Comprehensive Everglades Restoration Plan Fund) in the amount of \$160,000 are budgeted and the remainder is subject to Governing Board Approval of the FY13-FY16 budgets. FFWCC/FWRI is providing an in-kind cost share of at least \$241,456 for the life of the cooperative agreement.

This Board item impacts what areas of the District, both resource areas and geography: The monitoring project encompasses an area from Lostman's River on the southwest coast of Florida through Florida Bay and into Barnes Sound on the southeastern coast (see attached map). The contract will be managed by Everglades Ecosystem Assessment Section staff in the Applied Sciences Bureau.

What concerns could this Board item raise? This Cooperative Agreement provides for the continuation of work currently under way in the Southern Coastal Systems by the same Principal Investigators in the FFWCC/FWRI. While FFWCC/FWRI is a state agency and no competition was held, they are providing a cost share of approximately a 34% in-kind cost share to help implement this monitoring project. Continuing the work with the same investigators ensures continuity and comparability of the data as well as the consistency of sampling methods.

Why should the Governing Board approve this item? CERP projects that affect this region are already under construction. If this monitoring project is not approved, a major component of determining CERP success will not have a continuous dataset resulting in an inability to effectively assess the success of CERP. In addition, this monitoring project complements another CERP/RECOVER MAP component funded by the U.S. Army Corps of Engineers, the Juvenile Spotted Sea Trout Monitoring. Furthermore, this project will provide data for current and future modeling efforts and will provide ground truth data for future mapping efforts using remote sensing.

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Separate Attachment – map: resolution 150dpi, FHAP-SF_map.jpg